



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,188	01/26/2004	David Bell	2004-0118	6441

513 7590 02/27/2006  
WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

BISSETT, MELANIE D

ART UNIT PAPER NUMBER

1711

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

<b>Office Action Summary</b>	Application No. 10/763,188	Applicant(s) BELL, DAVID	
	Examiner Melanie D. Bissett	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,21 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/398,709.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The prior art rejections have been altered to reflect the new claims.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei.
4. Tsuei discloses coating compositions comprising urethane/acrylic copolymers and crosslinkers, where the coatings have a degree of solvent, water, and alcohol resistance (abstract; col. 3 lines 53-59). Aziridine crosslinking agents are preferred, where the reference suggests mixtures of crosslinking agents (col. 5 line 36-col. 6 line 15). Thus, it is the examiner's position that one skilled in the art would envision coatings comprising two or three crosslinkers, where one crosslinker is an aziridine compound. Additional polyurethane thickeners and polyurethane or acrylic adhesion promoters are also suggested for incorporation into the coatings (col. 6 lines 33-36; col. 8 lines 30-40). Polyolefin sheets are suggested as backing sheet materials (col. 11 lines 17-35). Examples show coatings comprising urethane and acrylic polymeric components with a crosslinker applied to a polymeric sheet. Substrates having no primer layer are also shown (examples 16, 18, 19-23). Because the coatings are made

of the same materials claimed by the applicant, it is the examiner's position that the coatings would be ink receptive and capable of use as a label or graphic arts display.

5. However, the reference does not exemplify the combination of a polyolefin substrate coated with a composition containing two or more crosslinkers, where at least one is an aziridine or carbodiimide. Since the polyolefin films are suggested by the reference, and since mixtures of crosslinkers are also suggested by the reference, it is the examiner's position that it would have been prima facie obvious to choose a mixture of crosslinkers to be combined with the coating and choose a polyolefin film as the substrate. One skilled in the art would have been motivated to make this choice by the reference's suggestion and with the intentions of forming an article with equally improved durability and flexibility (examples).

#### ***Allowable Subject Matter***

6. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

8. The closest prior art, Tsuei, discloses coating compositions comprising urethane/acrylic copolymers and crosslinkers, where the coatings have a degree of solvent, water, and alcohol resistance. Although the reference suggests aziridine crosslinkers and suggests mixtures of crosslinkers, the reference does not disclose the

use of oxirane or isocyanate crosslinkers with the aziridine compounds. For this reason, it is the examiner's position that the claimed sheets provide a novel and unobvious step over the prior art.

### ***Response to Arguments***

9. Regarding the applicant's arguments that there is no specific disclosure of a mixed crosslinking system using aziridine crosslinkers, it is noted that the reference teaches mixtures of crosslinkers and teaches that the most preferred crosslinker would be an aziridine compound. Indeed, the only crosslinkers specifically suggested and exemplified are aziridine compounds. Thus, it is the examiner's position that one skilled in the art, from the teachings of Tsuei, would envision a plurality of aziridine compounds as the crosslinker component.

10. In response to the applicant's argument that surprising results are obtained when using two or more crosslinkers, it is noted that the reference teaches mixtures of crosslinkers. Also, one skilled in the art would envision one of the crosslinkers being an aziridine compound, since they are the only compounds suggested and exemplified. Although the reference does not note the ink-printability of the coating, it is again noted that the reference teaches the coating composition claimed by the applicant. Thus, it seems reasonable that the coating would have the same printability. It should also be noted that "ink-printable" is read by its broadest interpretation. A coating having any degree of printability by ink would read on the claims.

***Conclusion***

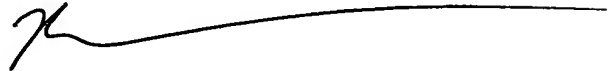
11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett  
Primary Examiner  
Art Unit 1711

mdb